Carbohydrates and sugars are normally digested and absorbed in the stomach and small intestine. Some people have disorders that interfere with the normal digestive process. For example, lactose is a sugar found in milk. It requires the enzyme lactase for digestion. A person with lactase deficiency may not be able to digest lactose properly. These abnormalities in digestion allow carbohydrates and sugars to pass undigested into the colon, where gas forming bacteria thrive on them. Some foods, such as legumes, cabbage, or certain types of bran contain carbohydrates that the body cannot digest. However, bacteria in the colon can use them for food, and as they are digested by the bacteria, gas is produced.

Everyone reacts to foods differently. For instance, two people can eat the same amount of a carbohydrate. One forms large amounts of rectal gas; the other forms little. For those people frequently bothered with excessive gas, a special diet may be recommended to identify and eliminate the offending foods. The accompanying chart lists those foods that most often contribute to abdominal gas and flatulence.

Gas Elimination Trial Diet

First, check with a physician to rule out any other medical causes for excess gas. The physician can also give advice on maintaining adequate nutrition. This trial diet may be conducted in one of two ways:

1. Eliminate one category of gas producing foods for at least a week. If there is no lessening of gas, put the foods back in the diet and go on to eliminate another category. Follow this procedure until reaching a level of gas that is tolerable.

2. Eliminate all categories from the diet for three or four days. Then add one food at a time back to the diet. Continue to include this food in the diet for three or four days. If the selection causes no problems, it may be kept in the diet. If it does, eliminate it and go on to the next food.

Sometimes the food may not have to be completely eliminated; smaller amounts may be tolerated. For example, many people complain that adding fiber to the diet causes gas. Yet, this problem seems to be reduced if the fiber is added gradually over a period of several weeks. These procedures require time and persistence, but can be very effective in controlling an uncomfortable problem. Regardless of results, remember that rectal gas is not harmful to the body.

Foods That Contribute to Gas Production

Legumes: Especially dried beans and peas, baked beans, soy beans, lima beans

Milk Products: Milk, ice cream, cheese

Vegetables: Cabbage, radishes, onions, broccoli, Brussels sprouts, cauliflower, cucumbers, sauerkraut, kohlrabi, asparagus

Root Vegetables: Potatoes, rutabaga, turnips

Fruits: Prunes, apricots, apples, raisins, bananas

Cereals & Breads: Cereals, breads, pastries, and all foods containing wheat and wheat products. Check labels

Fatty Foods: Pan-fried or deep-fried foods, fatty meats, rich cream sauces and gravies, pastries, and any high-fat food. Check labels.

Liquids: carbonated beverages, fizzy medicine

Summary

Gas means different things to different people. It may refer to belching, abdominal bloating, or rectal gas. For some it may be simply an embarrassment, while for others it can be quite uncomfortable. However, it is rarely a serious medical problem. Working with a physician, a person suffering from gas can usually find simple solutions to significantly reduce the problem.

Gas

Everyone comments sometimes on the digestive problem of gas. When people complain of gas, they usually mean one or more of the following:

- Frequent belching of air from the stomach
- Bloating of the abdomen after eating
- Frequent passing of gas from the rectum

It may be uncomfortable or inconvenient, but only rarely is gas associated with a serious illness. Gas is usually just the result of certain habits or diet choices. It occurs in one of two ways: as a result of swallowed air, or it is produced in the intestinal tract. Reclining after eating, inactivity, and stress may contribute to the problem. If the physician suspects gas is the result of some other illness, tests will be ordered to diagnose the problem.

Belching

Everyone belches occasionally, especially after eating. However, some people belch frequently, and it becomes annoying and embarrassing. Belching is the result of too much air in the stomach. It gets there by being swallowed with food or liquid. The stomach releases it by forcing it up the windpipe in a belch. The more a person swallows, the more air goes into the stomach and the more belching. Some people are known as air swallowers. They gulp large amounts of air when eating or drinking; they may produce larger quantities of saliva that requires frequent swallowing; or they just have a nervous habit of swallowing more often.

Occasionally, it is necessary to treat excessive belching with medicine. In most cases, however, patients can reduce belching by following simple lifestyle changes to correct the causes.

Hints for Reducing Belching

- Air swallowers should concentrate on trying to reduce the number of times they swallow.
- Avoid pipes, cigarettes, and cigars; chewing gum and hard candy; sipping through straws and bottles with narrow mouths; and dentures that do not fit properly. They can increase saliva or air swallowing.
- Avoid foods that contain air, such as carbonated beverages or whipped cream. Fizzy medicines, such as bicarbonate of soda, also add air to the stomach.
- Eat slowly. Gulping food and beverages adds large amounts of air to the stomach.
- Do not deliberately swallow air to force a belch.

Bloating

For unknown reasons, bloating—that feeling of swelling in the abdomen—occurs most often in females. For many people, it is simply a sensation of stuffiness. However, for some it can feel downright painful. It is not necessarily caused by too much gas. Usually bloating is a result of poor motility. Motility refers to the contractions that automatically move food through the digestive tract. Poor motility slows the movement of food through the stomach and intestinal tract. Eating fatty foods can also delay stomach emptying, leading to bloating.

Bloating is often a part of irritable bowel syndrome, a condition in which there is disorganized motility and spasm of the bowel.

Sometimes bloating is caused by a disease or a disorder in the stomach or upper part of the digestive system. For this reason, the physician may perform tests, including x-rays and endoscopy. Endoscopy is a visual examination of the esophagus and stomach with a thin, flexible, lighted tube.

When bloating happens frequently, the physician may prescribe medications to stimulate contractions in the stomach and upper intestine. Usually however, bloating is not serious. It may be caused by certain foods or simply by eating too fast. So, a change in eating habits is often all that is needed to control this condition.

Rectal Gas

Excessive flatus (rectal gas) is most often produced by bacteria in the colon (the large intestine). There are literally hundreds of different bacteria normally present in the colon. Most are harmless. In fact, they are even beneficial to digestion. However, bacteria rely on carbohydrates and sugars for their nutrition. In the process of breaking down these nutrients, bacteria generate gases such as hydrogen, carbon dioxide, and methane. Under normal conditions, many of these gases are reabsorbed and do not cause excessive flatus.